

# ***METHOD AND APPARATUS FOR DETECTING LOW CONTRAST OBJECT IN A DIAGNOSTIC IMAGE***

## **Abstract of Disclosure**

The present invention is directed to a method and apparatus of objectively testing the low contrast performance of an imaging system. Images of a uniform phantom and images of a low contrast detectability phantom are reconstructed. Thereafter, a group of pixels from an image of the uniform phantom are removed and replaced with a group of pixels from an image of the LCD phantom. A user or test observer is then prompted to identify which quadrant of the first phantom image contains a group of pixels from the LCD phantom. An accuracy of a user response is then determined and conveyed to the user. The present invention is applicable with a number of imaging modalities including computer tomography, magnetic resonance imaging, PET, ultrasound, and the like.

## Figures

Figure 1: A line graph showing the relationship between the number of hours spent on a task and the number of errors made. The x-axis represents 'Hours' (0 to 10) and the y-axis represents 'Errors' (0 to 10). The data points are as follows:

Hours	Errors
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10

The graph shows a positive linear relationship, indicating that as the number of hours spent on the task increases, the number of errors also increases proportionally.